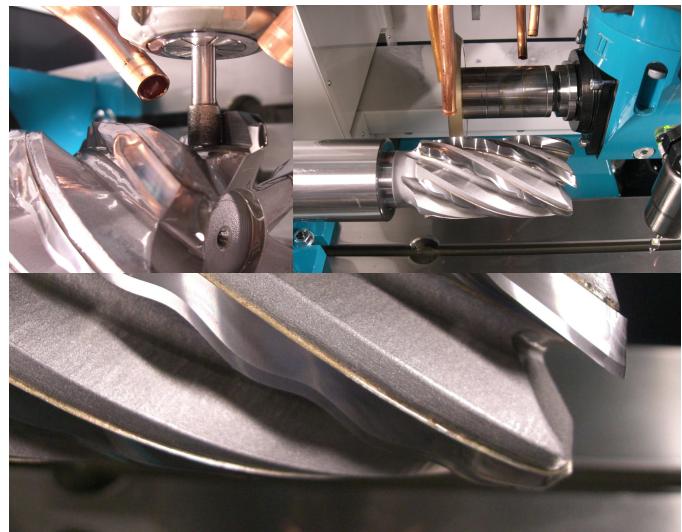


## Sinusedge-Endmill Ø55 Z6

### A1-300

Sinusedge grinding of flutes can be done in two different ways: one is using a sufficiently small fingerwheel, whose periphery grinds the rake of the flute. The other grinds in conventional way with a 12V9 of diameter 50 to 75 mm.

Advantage of the first type: large amplitudes of cutting edge and constant hook angles can be achieved. Advantage of the second type: no additional high speed spindle is used. The tool shown here uses the first type. The O.D. has been ground using standard wheels. To guarantee a perfect O.D. flatness an additional probing of the sinusoidal cutting edge can be executed after having ground the flute.



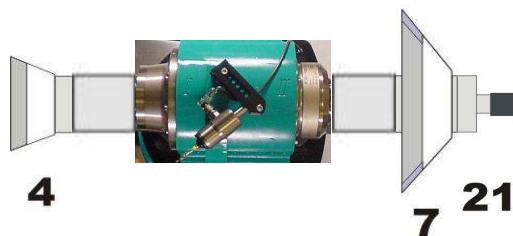
### 1. Cycletime for Production

Tool specifications							
	Diameter 55 mm, Cutting edges 6, Length of cutting edge 110 mm, Helix angle 35 deg						
Material HM							
Operations	Probe	Flute 1	Gashing	O.D.2	O.D.1	End 2	End 1
Feed [mm/Min]	2000	17	100	200	300	70	120
Power [kW]		4	2	1	1	1	1
Cutting feed [m/s]		18	22	24	24	24	24
Used wheels		21	7	4	4	4	4
Grinding time [s]	73	3043	176	574	391	193	116
Total cycle time	76 Min 4						

The mentioned cycle times are indicative. The material to be ground, different grinding wheels or other coolants can influence the cycle times considerably.

### 2. Used Grinding Wheels

21 Ø8 1A1 D64  
7 Ø125 12V9 D64  
4 Ø75 11V9 D64



### 3. Machine and Software Requirements

Machines: 5 axes CNC grinders : CORVUS GDS, GEMINI DMR, NORMA CFG, additional high speed spindle  
 Control: Fanuc 160i  
 Coolant: Synthetic Oil, pressure 6 - 7 bar  
 Software: Quinto 4.2, DXQ

responsible engineer: OP, 1.3.07

[www.schneeburger.ch](http://www.schneeburger.ch)

J. SCHNEEBERGER Maschinen AG 4914 Roggwil Switzerland

Subsidiaries in: France, Deutschland, Italia, United States, UK, China

TECHNOLOGY  
FOR TOOLING



